

Exhibit 15

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF PENNSYLVANIA

IN RE: NATIONAL FOOTBALL LEAGUE
PLAYERS' CONCUSSION INJURY
LITIGATION

No. 2:12-md-02323-AB

MDL No. 2323

Kevin Turner and Shawn Wooden,
*on behalf of themselves and
others similarly situated,*

Hon. Anita B. Brody

Plaintiffs,

Civil Action No. 2:14-cv-00029-AB

v.

National Football League and
NFL Properties, LLC,
successor-in-interest to
NFL Properties, Inc.,

Defendants.

THIS DOCUMENT RELATES TO:
ALL ACTIONS

DECLARATION OF KENNETH C. FISCHER, M.D.

KENNETH C. FISCHER, M.D., hereby declares as follows:

1. I have personal knowledge concerning the matters addressed herein, and submit this declaration in connection with Plaintiffs' motion for approval of the proposed settlement of claims in this litigation. If called as a witness, I could and would testify competently to the facts and opinions set forth in this declaration. I hold all of the opinions set forth herein to a reasonable degree of medical certainty.

2. I am a board-certified neurologist with 39 years of clinical practice experience. After earning my medical degree from Duke University in 1971, I spent four years at the University of Miami with one year of internal medicine and three years of

neurology training. Immediately thereafter, in 1975, I became a member of the faculty of the University of Miami School of Medicine Department of Neurology. Currently I am a member of the teaching faculty with the title of Voluntary Associate Professor of Neurology.

3. For the past eight years I have been on the Executive Committee of the Board of Trustees of Catholic Health Services, as well as Chief of Professional Affairs of that organization, which owns and administers more than 30 facilities in the South and Central Florida region, including rehabilitation hospitals, skilled nursing facilities, intermediate care facilities, and outpatient home health agencies. A substantial number of the patients serviced by these facilities have suffered traumatic brain injuries requiring acute rehabilitation and long-term care. I have also served as a special senior consultant for neurological injuries for the Veterans Administration Hospital from 1978 through 2002. Again, a large number of the individuals evaluated were diagnosed with traumatic brain injuries. Also, I have served for the last eight years as a designated "EMA" Expert Medical Advisor, for the judiciary in the State of Florida for workers compensation injuries. Again, a significant percentage of these patients have been victims of a traumatic brain injury. I am a practicing neurologist with a very extensive practice and I have personally evaluated thousands of patients with all forms of traumatic brain injury. Additional information concerning my education, training, and experience is reflected in my curriculum vitae, a copy of which is annexed hereto.

4. Traumatic Brain Injury, often referred to as "TBI", is a serious medical condition throughout the world. In this country alone, more than 1 million people annually sustain traumatic brain injuries of various extents and etiologies. During

wartime, TBI is one of the most feared and common consequences, with many thousands of our veterans sustaining such injuries requiring long-term care. More recently, TBI has been more widely appreciated as a significant sequela of various contact sports, including football, boxing, soccer, and ice hockey. That reality was no doubt a predicate for the National Football Players Concussion Injury Litigation. It similarly underlies the Settlement that is before the Court.

5. While a single traumatic brain injury may cause the injured party to have some significant residual deficiency, aside from the very obvious substantial ones, the critical subgroup are those individuals who have sustained repeated clinical and subclinical traumatic brain injuries over a significant period of time. It is this group that composes the vast majority of individuals suffering substantial residual neurological and neuropsychological damage.

6. There are certain medically and scientifically well-defined syndromes that have been scientifically associated with repeated traumatic brain injury. These include amyotrophic lateral sclerosis (ALS or Lou Gehrig's disease), Parkinsonism, Alzheimer's disease, and dementia. *See Graves AB., et al. The Association Between Head Trauma and Alzheimer's Disease. Am. J. Epidemiol. 1990;131(3):491 (controlled study revealing statistically significant association between severe head trauma and Alzheimer's disease); Chen H, et al., Head Injury and Amyotrophic Lateral Sclerosis, Am. J. Epidemiol. 2007;166(7):810-816 (threefold increased risk of ALS among people suffering more than one head injury); Al-Chalabi A and Leigh PN. Trouble on the pitch: are professional football players at increased risk of developing amyotrophic lateral sclerosis? Brain 2005;128:451-453 (nearly six-fold increased risk of ALS among Italian professional*

soccer players and general population controls); Harris MA, et al. Head injuries and Parkinson's Disease in a case-control study. *Occup. Environ. Med.* 2013;70:839-44 (statistically significant association between Parkinson's disease and prior TBI, including remote mTBI and concussions); Goldman SM, et al. Head injury and Parkinson's disease risk in twins, *Ann. Neurol.* 2006;60:65–72 (three to fourfold increased risk of Parkinson's Disease in twin suffering TBI compared to sibling twin without TBI exposure).

7. These conditions have further been associated with mTBI, concussions, and/or football play. Harris A., 2013; Lehman EJ, et al. Neurodegenerative causes of death among retired National Football League players. *Neurology* 2012;79:1970-1974 (elevated neurodegenerative mortality among retired professional football players; approximately, four-fold increased risk of death from ALS and Alzheimer's disease among professional football players compared to general US population); Guskiewicz K., et al. Association between Recurrent Concussion and Late-Life Cognitive Impairment in Retired Professional Football Players. *Neurosurgery* 2005;57(4):718-724 (associating dementia-related syndromes in retired players with prior concussions; earlier Alzheimer's disease onset, and higher incidence, seen in younger retired player cohort); Lee YK, et al. Increased Risk of Dementia in Patients with Mild Traumatic Brain Injury: A Nationwide Cohort Study. *PLoS One* (2013);8:1-7 (statistically significant threefold increased risk of dementia in patients with prior reports of concussion and/or mTBI).

8. ALS, Parkinsonism, and Alzheimer's disease can be fairly diagnosed and confirmed by clinical and ancillary findings. They are specifically identified and compensated in the settlement agreement as qualifying diagnoses by reference to ICD-9/ICD-10 diagnosis codes. The documentation of these syndromes and diseases by

reference to ICD-9/ICD-10 diagnosis codes has become a standard practice in this country, one that virtually any physician would be expected to be familiar and skilled in.

9. There are other conditions that have been associated with concussions and TBI that are not among those specific diseases/syndromes, but which can be objectively delineated on neurological examination and neuropsychological testing. These conditions result in reduction of the individual's cognitive and functional capacity and can be categorized by the extent of the functional decline. The settlement appropriately recognizes and categorizes such individuals by gradations in the severity of their neurocognitive impairments. In particular, the settlement recognizes three grades of neurocognitive impairment: Level 1 Neurocognitive Impairment (moderate cognitive impairment), Level 1.5 Neurocognitive Impairment (early dementia), and Level 2 Neurocognitive Impairment (moderate dementia). These different categories have defined levels of deficit and dysfunction that can be confirmed by detailed neurological examination and concomitant neuropsychological testing, and reflect reasonable criteria and methods at ascertaining the level of impairments the settlement seeks to compensate.

10. The condition known as "CTE" (Chronic Traumatic Encephalopathy) more recently has been defined as a neurological condition, but only on postmortem testing. There is no diagnostic test to confirm that clinical condition in living patients, and CTE can only be properly identified and diagnosed on autopsy. Gardner A., et al. Chronic Traumatic Encephalopathy in Sport: a Systematic Review, *Br. J. Sports Med.* 2014;48:84–90.

11. Because CTE is not diagnosable in living patients, claims that a living player suffers from CTE cannot be medically confirmed. Current research into CTE—

essentially, case reports or series—has associated certain clinical symptoms retrospectively described by the family of deceased players (and non-players) as a potential clinical picture for CTE. The reported list of associated symptoms is long and, given its genesis, anecdotal. Though the type of long-term, prospective longitudinal studies that helped characterize the clinical picture for Alzheimer's disease have yet to be done, these anecdotal accounts to researchers usefully collect the range of reports. It includes: memory impairment, executive dysfunction, impaired concentration/attention impairment, language impairment, visuospatial difficulties, visual impairment, apathy, depression, suicidality, aggressiveness, irritability, headaches, disinhibition, explosivity, mood instability, gait disturbance, tremors, muscle weakness and spasticity, a sensitivity to noise, chronic pain, dysnomia, peripheral nerve dysfunction, sleep dysfunction, and somatic disorders. The list is notably broad, and undeniably overlapping with a range of conditions widely suffered by and prevalent in the general, non-professional football US population. Prospective longitudinal studies to characterize the clinical picture of CTE need to be performed, and “[c]linical criteria for the diagnosis of CTE need to be established and tested.” McKee AC, et al. The Spectrum of Disease in Chronic Traumatic Encephalopathy. *Brain* (2013);136:43-64.

12. Though the settlement does not independently compensate mood and behavioral symptoms, review of the lengthy symptom list in the CTE literature reveals that the settlement quite specifically addresses the cognitive-based symptoms that have been reported for CTE and that are evaluated for Level 1, 1.5, and 2 Neurocognitive Impairment, namely memory impairment, executive dysfunction, impaired concentration/attention impairment, language impairment, visuospatial difficulties.

Settlement Agreement Exh. 1. In addition to cognitive impairment in multiple domains, mood and behavioral symptoms have been reported in association with earlier stages of CTE pathology (what the authors refer to as CTE I and II); individuals with more advanced CTE pathology (what the authors denote as CTE III and CTE IV) are reported to have suffered from dementia in their lives. McKee AC, 2013. This research further reflects a high prevalence of co-morbid conditions among patients studied that were determined post-mortem to have CTE that the settlement recognizes as Qualifying Diagnoses. McKee AC, 2013, reports that many of the subjects in the study that were determined to have CTE pathology also reflected pathology for other neurologic/neurodegenerative disease, including Alzheimer's disease, Parkinson's disease, ALS, and frontotemporal dementia. Thus, a range of cognitive impairments, of various gradations (including dementia), as well as the Qualifying Diagnoses of Alzheimer's disease, Parkinson's disease, and ALS, are reflected in the anecdotal clinical picture for CTE.

13. Accordingly, retired players who are diagnosed while living with similar and confirmed objective abnormalities in the various Neurocognitive Impairment groups, or by meeting the criteria for Alzheimer's, Parkinson's, or ALS—without regard to whether they have CTE pathology—will be compensated. Stated differently, those retired players with objective evidence of these conditions/diseases will not be excluded from the negotiated settlement even if they do not possess underlying CTE pathology or their condition/disease is due to some other underlying pathology. On the other hand, those patients who have subjective abnormalities, or who may or may not have any objective correlate for their deficits at the thresholds under the settlement, will not fall

under the compensation guidelines until they do. When they do, they can be, and will be, reconsidered for inclusion. In my opinion, this approach is reasonable and appropriate because it allows for fair compensation based upon well-accepted measurable testing/diagnostic methodology.

14. There has been discussion and criticism written by Dr. O'Shanick as to the manner in which the neurological and neuropsychological deficits will be determined. These criticisms are unwarranted, in error, and contrary to the state of the art in neurological medicine. Retired players will undergo a comprehensive neurological examination by a board-certified neurologist. This is not a trivial endeavor. This evaluation is comprehensive and detailed and will include components including constitutional evaluation, mental status testing, speech testing, full cranial nerve investigation, motor function, sensory function, coordinative testing, reflex testing, back and neck evaluation, and gait and posture. The interview and examination typically require at least one hour. It is very difficult for any significant neurological abnormalities to escape such examination by an appropriately credentialed individual. The testing approach detailed in the Settlement comports with the state of the art in neurological medicine. Moreover, it is recognized under the Settlement that modalities for evaluation of the retired players should not be rigid and fixed. As new diagnostic measures, either radiographic or neuropsychological, are found to be reflective of objective neurological and neuropsychological damage, they can be incorporated into the evaluation process.

15. There has been some discussion and challenge voiced by Dr. O'Shanick of the type of practitioner opining on the ultimate deficits of the individual. This criticism seems particularly unwarranted. While many different fields of endeavor are involved

with traumatic brain injury, it is accepted nationally and internationally, that the most qualified individual is a board-certified neurologist with expertise in this field. Certainly, the evaluating neurologist may utilize consultants in other fields and the reports of other disciplines in making determinations. Such would include psychologists, psychiatrists, neuropsychologists, physiatrists, and physical/occupational/speech therapists. This is an inclusive process.

16. Similarly, retired players participating in the Baseline Assessment Program (BAP), or seeking evaluation for neurocognitive impairments independent of the BAP, will undergo neuropsychological testing by appropriately credentialed practitioners. Neuropsychological testing has been demonstrated in numerous empirical studies to accurately measure and describe cognitive and related abnormalities in patients with a wide range of neurological disorders, including persons who have sustained traumatic brain injury. Roebuck T, Moderate and severe traumatic brain injury, Ch. 21, & Mittenberg W., Mild Traumatic brain injury and postconcussion syndrome, Ch. 22, in Morgan JE, 2008, Textbook of Clinical Neuropsychology, NY.

17. In my practice of neurology, and in the diagnosis and treatment of patients with ALS, Alzheimer's disease, Parkinson's disease, and Dementia, I rely upon both my education, experience, and accepted neurological screening testing, as well as other professionals such as neuropsychologists who make use of the standard testing referenced in the Settlement test battery.

18. Certain objectors have challenged the appropriateness of the 75% reduction in compensation awards to retired players who suffer a medically confirmed stroke prior to the development of a qualifying diagnosis. In my opinion, the

presumptive offset for medically documented stroke preceeding the development of a qualifying diagnosis is scientifically sound and rationally based. As a threshold matter, there is a significant association between stroke and dementia. Sahathevan R., et al. Dementia, Stroke and Vascular Risk Factors – A Review. *Int. J. Stroke* 2012;7:61-73. Indeed, strokes are recognized as one of the most common causes of dementia. Doctors often refer to this particular type of dementia, primarily caused by strokes, as “vascular dementia.” Further, the risk factors for stroke have been independently associated with other neurologic conditions, including Alzheimer’s Disease.

19. A related contention raised is that the concussive and sub-concussive impacts at issue in this litigation by retired NFL players potentiate the risk of subsequent stroke. The medical literature regarding stroke and brain trauma, however, does not demonstrate a correlation between concussion and remote stroke risk. Indeed, I am not aware of any longitudinal or prospective study of the risk of concussions in athletes and stroke. The more general papers cited by certain experts challenging the settlement correlate moderate to severe TBI with stroke (Burke JE, et al. Traumatic Brain Injury May Be an Independent Risk Factor for Stroke. *Neurology* 2013;81:33-39), or evaluate near-term stroke risk following TBI in a relatively short period of time following the stroke (Liao C., et al. Stroke Risk and Outcomes in Patients With Traumatic Brain Injury: 2 Nationwide Studies. *Mayo Clin. Proc.* 2014;89:163-172). Upon my review of these and other publications, and based on my professional experience in treating patients who have suffered strokes, in my opinion there is no correlation between concussive and sub-concussive impacts and remote stroke risk.

20. Finally, certain objectors contend that the stroke offset is not reasonable because a particular NSAID that was allegedly administered to retired football players when they played (Toradol) increased latent stroke risk. I am not aware of any scientific support for that contention, and I have seen no such reference in any of the papers cited by the objectors. In my opinion, the offset for medically diagnosed stroke is reasonable and supported by the science.

21. Under the settlement, retired players that suffer a severe TBI before their diagnosis of a qualifying injury are subject to a presumptive reduction in their award. The severe TBIs that warrant such reductions are those suffered independent of NFL football play, during or after their time in the NFL, and are quite severe—i.e., open or closed head trauma resulting in a loss of consciousness for greater than 24 hours. *See, e.g.,* ICD-9 Codes 854.04, 854.05, 854.14, 854.15. Severe TBI been shown through studies to increase the risk of severe neurologic syndromes and conditions like those at issue compensated under the settlement. *See* Gardner R. Dementia Risk After Traumatic Brain Injury vs Nonbrain Trauma, *JAMA Neurology* 2014; Harris MA., et al. Head injuries and Parkinson's disease in a case-control study. *Occup. Env. Med.* (2013);70:839; Guo Z., et al. Head injury and the risk of AD in the MIRAGE Study. *Neurology* (2000);54:1316-1323; Deapen D. and Henderson B. A Case-Control Study of Amyotrophic Lateral Sclerosis. *Am. J. Epidemiol.* 1986;123(5):790-799. In my opinion, the connection between severe TBI and the diagnoses at issue in the settlement is scientifically sound.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: November 11, 2014
Miami, Florida

A handwritten signature in cursive script, appearing to read "Kenneth C. Fischer", written over a horizontal line.

Kenneth C. Fischer, M.D.

CURRICULUM VITAE

**KENNETH C. FISCHER, M.D.
1190 N.W. 95TH STREET
SUITE #402
MIAMI, FLORIDA 33150**

Vitae - Kenneth C. Fischer, M.D.

Date Of Birth: July 20, 1947

Military Status: Captain, U.S. Army Reserve, 1971-1977 (Reserve duty now completed)

Academic Education & Degrees

Duke University, Durham, North Carolina	1964-1967 1967 B.A.
Duke University, School of Medicine, Durham, North Carolina	1967-1971 1971 M.D.

Postgraduate Medical Training

University of Miami, School of Medicine, Miami, Florida Internal Medicine Internship	1971-1972
University of Miami, School of Medicine, Miami, Florida Resident in Neurology	1972-1975

Honors & Special Awards

Angier Biddle Duke Scholarship	1964-1967
Magna Cum Laude	1967
Phi Beta Kappa	1967
Duke Medical School Scholarship for Academic Distinction	1967-1971
AMA Physicians Recognition Award	1975-1978 1979-1982 1982-1985 1985-1988 1988-1991 1991-1994 1994-1997 1997-2000 2000-2003 2003-2006 2006-2009 2009-2012 2012-2015
Physician Advisory Committee, St. Catherine's Rehabilitation Center	2001-Present

Academic Appointments

Assistant Professor of Neurology, University of Miami	1975-1976
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School Of Medicine

Clinical Assistant Professor Of Medicine, University of Miami School of Medicine	1976-1984
Clinical Associate Professor, Department of Neurology University of Miami School of Medicine	1984-1992
Voluntary Faculty, Department of Neurology University of Miami School Of Medicine	1992-Present

Teaching Responsibilities

Department of Neurology, Jackson Memorial Hospital	1975-Present
Special Consultant, Miami Veterans Administration Hospital	1979-2000
Neurology, American University of the Caribbean	2008-Present

Licensure

National Board of Medical Examiners	1971
State of Florida #24675	October 1971
New Mexico Medical Board, License# MD2006-0530	July 2006

Research Activities

1. Clinical Neurological Studies Involving Myasthenia Gravis, Neurosyphilis, Status Epilepticus, Dementia, Stroke
2. Participation in Bromocriptine Pilot Study
3. Participation in clinical study of Ticlopidine in prevention of stroke
4. Investigator, Eliprodil in treatment of acute ischemic strokes, 1995-1996
5. Participation in VNS (Vagal Nerve Stimulator) for refractory epilepsy, 1997-2003
6. Principal Miami Investigator for POINT (Platelet Oriented Inhibition in New TIA and Minor Ischemic Stroke) Study sponsored by NIH and University of Michigan

Specialty Boards

American Board of Psychiatry and Neurology, Diplomate	1978
American Board Of Quality Assurance and Utilization Review	1988
American Academy of Pain Management, Credentialed	1992

Societies

American Academy of Pain Management	Fellow
Florida Medical Association	Member

Community Activities

Member of North Shore Medical Center Corporation	1981-1997
Member of North Shore Medical Center Trustees	1985-1988
Treasurer and Chief of Finance North Shore Medical Center	1985-1988
Secretary, Board of Trustees, North Shores Medical Center	1994-1996
Member Board of Trustees, North Shore Medical Center	1996-2001
Secretary, Board of Trustees, North Shores Medical Center	1999-2000
Charter Member, North Dade Medical Foundation	1997-2007
Grants Committee, North Dade Medical Foundation	2000-2007
Board of Trustees, MOVERS	2005-2009
Board of Trustees, Catholic Medical Services	2006-Present
Executive Committee, Catholic Medical Services	2007-Present
Chairman, Professional Affairs, Catholic Medical Services	2007-Present
Director, North Shore Medical Center Stroke Program	2008-Present

Government Activities

Special Disability Examiner Neurology, Veterans Administration	1979-2000
Neurology expert, Florida Professional Review Organization	1985-Present
Expert Medical Advisor, Florida Division Of Workers Compensation	1995-Present
Special Consultant, South Florida Evaluation and Treatment Center, Florida Department of Children and Families	2004-Present

Scientific Presentations, Lectures & Program Participation- Only National Programs Included

1. "Oral Corticosteroids in the Treatment of Ocular Myasthenia"
Fischer, K. C. and Schwartzman, R.J. American Academy of
Neurology, San Francisco, California April 22-27, 1974
2. "Incidence and Manifestation of Neurosyphilis in a Random Hospital
Population". Fischer, K.C. and Schwartzman, R.J. American Academy of Neurology,
Miami Beach, Florida. April 28-May 3, 1975
3. "Oral Corticosteroids in the Treatment of Ocular Myasthenia".
Fischer K. C. and Schwartzman, R.J. International Myasthenia Gravis
Foundation Conference, New York City, New York June 1975
4. "Status Epilepticus in General Hospital Population". Ginsberg, P.
and Fischer, K.C. American Academy of Neurology, Toronto, Canada.
April 25-30, 1976.
5. Participation in the Bromocriptine Pilot Study Program.
Abel, M and Fischer, K.C. 1978-1981.

Publications

1. Fischer, K.C. and Wilson, W.P.: Methylphenidate and the Hyper-
kinetic State. Diseases of the Nervous System. 32:695-699, 1971
2. Fischer, K.C. and Schwartzman, R.J.: Oral Corticosteroids in the
Treatment of Ocular Myasthenia Gravis. Neurology. 23:795-798, 1974
3. Fischer, K.C. and Schwartzman, R.J: Oral Corticosteroids in the
Treatment of Ocular Myasthenia Gravis. Ophthalmology Digest. April 1975
4. Fischer, K.C. and Schwartzman, R.J.: Oral Corticosteroids in the
Treatment of Ocular Myasthenia Gravis. Annals of N.Y. Academy of
Science. 275:652-658, 1976

Hospital Medical Staff Privileges

CEDARS MEDICAL CENTER, Miami, Florida, Courtesy	1976-2007
UNIVERSITY OF MIAMI MEDICAL CENTER, Miami, Florida Attending	2007-Present
NORTH SHORE MEDICAL CENTER, Miami, Florida Attending Physician- Neurology	1976-Present
JACKSON MEMORIAL HOSPITAL, Miami, Florida, Courtesy	1975-Present
ST CATHERINE'S REHABILITATION CENTER, Miami, Florida Neurology Consultant	1996-Present

January 2014